

**NATURAL RESOURCES CONSERVATION SERVICE**

**PRESCRIBED GRAZING**

(Acre)

**Code 528A**

**Supplement No. 1 - Plant Control With Goats**

**GENERAL SPECIFICATIONS**

Goats may be used to reduce species such as oaks, Sericea lespedeza, blackberries, sumac, winged elm, greenbrier, kudzu, and other species that goats will eat. Goats may be used as initial treatment, or as a follow-up treatment to chaining, dozing, rollerchopping, prescribed burning, or shredding. Some success has been observed with eastern redcedar control. If the brush is too tall for the goats, they will eat out the understory, leaving no forage for grazing.

The past browsing experience of the goats will influence their choice of forages. If the targeted species is a novel forage, there may be a conditioning period before the goats will consume the desired forage. Goats that have prior experience will more readily begin browsing the targeted plant. Goats will also eat grasses and desirable forbs. Therefore, a rest-period is needed to achieve recovery of the desired plant community.

Record the objectives, which will be for plant reduction or sustainability. The resource inventory shall record the canopy of the targeted species. The forage inventory should reflect the initial forage-animal balance.

**CONTINGENCY PLAN**

The grazing plans should also contain a contingency plan to adjust the stocking rates. This would include provisions for the goats during the "off season" when deciduous forage is not available.

**MONITORING**

Develop appropriate records to measure progress toward goals. This could consist of canopy counts, goat days per acre, or other measures that will provide a trend analysis.

**CONSIDERATIONS**

The client may not want to eliminate the targeted plant from the pasture, particularly if goats are an economically beneficial enterprise. If the objectives of the goating are to browse at an intensity that will maintain the species for goats, then plan accordingly.

Removal of some woody species may adversely impact wildlife species. If wildlife is a consideration, the objective of goating should be to maintain the needed amount of brush for wildlife.

The following grazing plans are available to be used with goats to manage problem plants:

**Plant Reduction**

**1. Priority Pasture Method**

- Knock the target plants down to the goats' browsing level using mechanical, fire or other means if needed.
- Use two or more pastures (five preferred), designating one as the priority pasture. Use high density grazing that will begin when the leaf of the target brush species is one half to two thirds full size in the spring. Use enough goats to achieve 80% defoliation within 7 to 14 days in the priority pasture. A suggested starting stocking rate would be to stock at 1 goat per acre in the priority pasture for each 1-3 percent of canopy cover. Rotate the goats through the remaining pastures to maintain nutrition until the priority pasture plants have regrown to about half to two-thirds full size. This should take about 25-35 days. Pull the goats out of the rotation and put them back into the target pasture, again achieving an 80 percent defoliation.
- Repeat this process until desired level of reduction has been achieved. Depending

upon brush species and density, it may take three years to effect a favorable change.

- Once the reduction has been achieved in the priority pasture, then another pasture can be designated as a priority pasture and the process applied accordingly.

## **2. Thirty (30) days in and 30 Days Out or Two-Pasture Switchback Method**

The most effective control occurs when new leaves and twigs are browsed in the initial stage of growth. Stock with enough goats to obtain at least 65 percent defoliation in approximately 30 days. After defoliation, rest the pasture for approximately 30 days. This system is a 30-day in and 30-day out grazing system with goats that results in at least 3 months of rest each growing season. Alternate the starting pasture each year. A minimum of 3 years of goating is generally needed to obtain desired control. Calculate stocking rate the same as the priority pasture method.

### **Sustainability**

The Prescribed Grazing (528A) standard and specification contains guidelines for managing *Sericea lespedeza* for sustainability. However, there is little precedence for managing woody plants for sustainability in Oklahoma. Therefore, the following guidelines are to be used along with monitoring for self-evaluation and adjustment.

## **1. Multi-pasture scenario**

Utilize one herd of goats in three or more pastures, five or more being preferred. Introduce the goats in the early spring. Defoliate the key species of plants to about 25% of current growth, then rotate to the next pasture. Set the rest period so that the woody plants are not defoliated any more than twice per growing season. Select a suggested starting stocking rate of .25 goats for each one percent of woody cover unless a forage inventory - animal balance analysis suggests a different amount. Monitor the re-growth and goat performance. If excess use is being observed, adjust stocking rate accordingly.

## **2. Thirty (30) days in and 30 Days Out or Two-Pasture Switchback Method**

Stock with enough goats to obtain about a 20 percent defoliation in approximately 30 days. After defoliation, rest the pasture for approximately 30 days. This system is a 30-day in and 30-day out grazing system with goats resulting in at least 3 months of rest each growing season. Alternate the starting pasture each year. Calculate the stocking rate as in the multi-pasture scenario.

Prior to inclusion of goats into a conservation plan, the plan shall be concurred by one of the State Range/Grazing Lands Specialists.

/s/ Mark Moseley acting for:

KENNETH E. MATLOCK, Acting SRC

5/31/02

date